

**Project No. 604428 - 14**

**PROJECT UTILITY COORDINATION FORM**

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## Project Utilities Coordination (PUC) Form

### CONTACTS AND GENERAL UTILITY INFORMATION

<b>City/Town:</b> Chelsea	<b>Project File #:</b> 604428	<b>PUC Completed by:</b> J. Goyne/A. Christakis	<b>Utility Pole Set:</b> Nstar Electric
<b>Route/Street:</b>	<b>Resident Engineer:</b>	<b>Scheduled Ad Date:</b>	<b>Total Poles Relocated:</b>
Silverline Busway & Washington Ave. Bridge	To be determined	Joseph Pavao Jr.	6 utility poles and 8 high tension power line poles 7/19/2014

<b>Consultant:</b> AECOM	<b>Contact:</b> Francis Astone	<b>Office #:</b> (978) 905-2173	<b>Cell #:</b>	<b>Email:</b> Francis.Astone@aecom.com
Utility Company	Contact	Office #	Cell #	Email
Nstar Electric (Distribution)	Aruna Sikkaram (617) 369-5533		x	aruna.sikkaram@nu.com
Verizon	Paul Mirley (978) 837-6199		x	paul.d.mirley@verizon.com
Comcast	Earle Lawson (617) 279-1925		x	earle.lawson@cable.comcast.com
National Grid Gas	Tommy Fang (617) 438-0718		x	tommy.fang@nationalgrid.com
Chelsea Water	Andrew B. DeSantis (617) 466-4206		x	adesantis@chelseama.gov
Chelsea Fire	Allan Alpert (617) 466-4660		x	aalpert@chelseama.gov
Crown Castle	Joseph Guido (917) 563-3684	(914) 420-2123	x	joseph.guido@crowncastle.com
MBTA	John McCormack		x	jmcormack@mbta.com
Nstar Electric (Transmission)	David Amann			David.Amann@nu.com
BCE Nexia	Gillian Birch (905) 614-4794		x	gillian.birch@bell.ca

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Date:

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Utility Relocation Notes for MassDOT Contractor

Unless otherwise noted by Contract, the MassDOT Contractor is to provide the District Construction Office **with 7 Calendar Days advance** notification in order to validate the current progress and provide the required 30 Days advance notice-to-proceed for the first Utility - and each subsequent Utility. These advance notifications are to be identified in the Contractor's Schedules (Pre-Con preparation, Baseline, Subnets, and Updated/Monthly Schedules) as specified in Subsection 8.02 (for DBB Contracts) and/or Section 9 (of DB Contracts). Note: The durations included below do not include these lead-times. See Additional 'Important Basis notes for Contractor' - on last PUC Form page.

Additional notes:

Please note that the Utilities on Bridge/Structure refers to existing facilities and not proposed final locations. Existing aerial utilities over the Washington Avenue bridge shall be relocated underground and through the new bridge. The BCE Nexxia network is located within the limits of the proposed busway. Note that no excavation/ground works shall be performed prior to confirming network location by test pit and that no excavation/ground works shall be performed within 2 meters (measured vertically and horizontally) of confirmed locates without a BCE Nexxia approved inspector present. See Conditions for Working Around the Network of BCE Nexxia for further details.

**Suggested Sequence of Relocation (Based on Consultant proposed construction staging)**

*The sequence as detailed on the following pages is based on the consultants proposed staging plan. This information was compiled through meetings that included all of the utilities listed below along with the designer and the City of Chelsea. The information provided is the best available information prior to project advertisement.*



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PUC FORM - CONTINUED

Is 'enabling' (prep) work, by the Contractor, necessary prior to the start of the first series of utility relocations:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	<input checked="" type="checkbox"/> x	
Has any of the Utility work been identified to work concurrently	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	<input checked="" type="checkbox"/> x	

## **DESCRIPTION - Utility Relocation Phases, Tasks and Activities**

RESPONSIBLE PARTY	C = Contractor U = Utility Co.	DESCRIPTION - Utility Relocation Phases, Tasks and Activities					Estimated Duration (Work Days) by Utilities (Lead time not included)	Contractor Off-Site	Contractor Concurrent	Potential Access Restraint (Yes/No)	Access Restraint (AR) & Limitations of Operations Notes	
		Concurrent / Exclusive Utility Work			Limitations							
		The Contractor will need to prepare the site and perform the installation of the manholes and conduit. In order to install the conduit for the utility companies over the bridge, the Contractor will need to demolish a portion of the existing bridge, build the piers and abutments and place the new beams. National Grid Gas should conduct their work (if required) before the contractor begins major bridge work as their facilities are to be removed outside of the proposed structure limits.	Utility Working with Vicinity	No Contractor physical construction operations on-site (while utility is working)	Contractor Off-Site	Contractor Concurrent	the same working vicinity on-site - but NOT in the same vicinity	Utility are working on-site	Contractor Concurrent	Contractor Off-Site	Reason/Note (optional)	
Bridge Stage 1		Task: 1	National Grid Gas	U	Excavate test hole to determine location of existing underground facilities. Excavate gas main squeeze off pit. Install gas stopper equipment. Squeeze off gas main. Cut & cap gas main. Transfer existing gas service, if necessary. Backfill and restore trench.		3	x	x	x		
		Task: 2	Nstar Electric	U	Install 4 new poles/poles/wire, #1, 2, 3 and 2/10 as indicated		4	x	x	x		
			C	Install 2 manholes (6x10x8)		10	x	x	x	y	MASDOT contractor performing work	
			C	Install 6-5" FRC from MH #1 to MH #2 (+/- 250')		10	x	x	x	y	MASDOT contractor performing work	
			C	Install 2-5" PVC EB from P2/10 Highland to MH #2 (+/- 25')		2	x	x	x	y	MASDOT contractor performing work	
			C	Install 2-5" PVC EB from new P3 Heard to MH #1 (+/- 150')		6	x	x	x	y	MASDOT contractor performing work	
			C	Install 2-5" PVC EB from new P2 Highland to MH #1 (+/- 10')		2	x	x	x	y	MASDOT contractor performing work	
						Sub-Total	34					
		Task: 3	Verizon	U	"White Mtn Cable" to place new split Manhole 50 and lateral ducts to MH 50A + 49		10	x	x	x		
			U	Verizon to place new cables from New MH 50 to MH 49 + 50A		2	x	x	x	x		
			U	Verizon to splice and cut-over working facilities in these cables		24	x	x	x	x		
			U	Verizon to remove old cables		2	x	x	x	x		
			U	"White Mtn Cable" to remove old manhole and ducts		2	x	x	x	x		
			U	American U-Tel to expose the existing ducts in the EAST sidewalk and excavate back to the beam support pos.		10	x	x	x	x		
			U	American U-Tel to transport and install the 135ft beam and temp support the existing ducts and cables		5	x	x	x	x		
			U	American U-Tel to position the cables and ducts within the new utility bay and install split fiberglass duct and hanging supports		10	x	x	x	x		
						Sub-Total	65					
		Task: 4	Comcast	C	Placement of new Comcast manhole at the intersection of Heard & Washington Streets		2	x	x	x		
			C	Placement of conduits from P#1 Heard St. to new manhole		3	x	x	x	x		
			C	Placement of conduits from P#10 Washington St. to new manhole		3	x	x	x	x		
			C	Placement of conduits from P#12 Washington St. to manhole		3	x	x	x	x		
			U	Pulling of new fiber optic cables from Heard St. to Washington St.		10	x	x	x	x		
			U	Pulling of new coax cables from Heard St. to Washington St.		3	x	x	x	x		
						Sub-Total	24					

# DESCRIPTION - Utility Relocation Phases, Tasks and Activities

RESPONSIBLE PART

DESCRIPTION - Utility Relocation Phases, Tasks and Activities		Access Restraint (AR) & Limitations of Operations Notes	
Concurrent / Exclusive Utility Work		Contractor note: In planning and executing the work, the information in these 4 columns is intended to supplement any related Access Restraints that are described in the Special Provisions.	
Exclusive Utility on site	Concurrent Utilities	Contractor Off-Site	Contractor Concurrent
Potential Access Restraint (Yes/No)	Reason/Note (optional)		
Bridge Stage 2	Enabling' work by the Contractor - Possible minor site work for overhead relocations. For Verizon's underground work, the existing west portion of the bridge deck will need to be removed so American U-Tel can place the support beam for Verizon's existing duct. Comply with BCE Nexxia vibration limits and conditions for working around the network (underground in the busway below) during the demolition of the existing bridge pier.		
<b>UTILITY OPERATIONS - Underground</b>			
Task: 1	<b>Verizon</b>		
U	American U-Tel to expose the existing ducts in the WEST sidewalk and excavate back to the beam support positions	10	x
U	American U-Tel to excavate back to install 135ft beam and temp support the existing ducts and cables	5	x
U	American U-Tel to position the cables and ducts within the new utility bay and install split fiberglass duct and hanging supports	10	x
U	American U-Tel to return 135ft beam to Verizon storage yard	1	x
		<b>Sub-Total</b>	<b>26</b>
<b>UTILITY OPERATIONS - Aerial</b>			
Task: 1	<b>Nstar Electric</b>		
U	Install Cable	5	x
U	Splicing	5	x
U	Install overhead equipment	6	x
U	Build Riser	8	x
U	Frame Poles	6	x
U	Install Wire	12	x
U	Install transformers	1	x
U	Remove poles P11/1, P2/11 & P31/1	3	x
U	Install new poles #21 & #22 on Spruce Street	4	x
U	Install guy anchors	1	x
U	Install Wire and transformers	3	x
U	Remove poles P21, P22	3	x
		<b>Sub-Total</b>	<b>57</b>
Task: 2	<b>Crown Castle</b>		
c	Provide a conduit pathway from pole #2, across the bridge to the new 2/10 pole in the event that Crown Castle cannot be accommodated in the Verizon duct bank, as required.		
U	Wreck out existing aerial fiber from utility poles	1	
U	Re-install aerial and underground fiber cable into conduit. Underground conduit and pole riser sweeps to be provided by others.	3	
U	Re-slice fiber cable at both ends. Test and reconnect node.	1	
		<b>Sub-Total</b>	<b>5</b>
Task: 2	<b>Chelsea Fire Department</b>		
U	Run cable, install fiber	1	
U	Connections & Testing	1	
U	Demo Existing cables	1	
		<b>Sub-Total</b>	<b>3</b>
Task: 2	<b>Comcast</b>		
U	Schedule of splicing of Fiber Cables (90 days notice)	5	x
U	Schedule of splicing of Coax Cables	5	x
U	Schedule of wreck out of aerial coax and fiber from poles	3	x
		<b>Sub-Total</b>	<b>13</b>
Busway Stage 1	Enabling' work by the Contractor - Site work for overhead relocations. BCE Nexxia underground network to stay in place whenever possible. The contractor shall, at the direction of the Engineer and under the supervision of BCE Nexxia, encase the network in concrete wherever the minimum cover limits are not satisfied. The contractor shall comply with the BCE Nexxia vibration limits and conditions for working around the network while constructing the new busway. This work (test pits and concrete encasement) should happen as early as possible.		



DESCRIPTION - Utility Relocation Phases, Tasks and Activities		Access Restraint (AR) & Limitations of Operations Notes	
C = Contractor	U = Utility Co.	Estimated Duration (Work Days) by Utilities (Lead time not included)	Concurrent / Exclusive Utility Work Contractor note: In planning and executing the work, the information in these 4 columns is intended to supplement any related Access Restraints that are described in the Special Provisions.
			Utility working with other Utilities in vicinity No other Utilities on site Utility working with other Utilities on site No Contractor physical construction operations-on-site No Contractor concurrent operations-on-site Utility are working while Utility is working Contractor and utility are working on-site - but NOT in the same vicinity Contractor Concurrent
			Potential Access Restraint (Yes/No)
			Reason/Note (optional)

6 For all MassDOT construction contracts issued after January 2014, the new Utility Coordination/documentation specification is required. This is Section 8.14 in Design-Bid-Build Contracts (see Design-Build index reference for applicable section #).

7 Prior to starting any and all enabling work for Utilities, the Contractor is to plan in advance with submittals and approved durations.

8 \* Potential District Initiated Early Utility Relocation - if noted herein, the District reserves the right to initiate early utility relocation in advance of the Contract NTP. In submitting a bid price and in the development/basis of the Baseline Schedule, the Contractor shall not plan the Work with the potential benefit of any form of early utility relocation.' As a requirement of the Baseline submission, unless otherwise noted in this Specification, the earliest that the first Utility company is to receive the 30 days advance notification to mobilize to the site, will be 7 calendar days after the pre-construction meeting and never sooner than 7 days after the Contract NTP.

9 Please note that most of the utility work is related to the Washington Ave. bridge location. While this form states that the Contractor can perform work along the proposed busway but not on Washington Ave. This distinction will need to be discussed between the Contractor, Utility Companies and MassDOT construction personnel.

10 Comcast requires a 90 day notification before they will splice their fiber cables.

11 Comcast work appears to include the relocation of AT&T cables as well.

12 Overhead relocations for each company cannot be completed until the new underground infrastructure is in place. This includes manholes, conduit and necessary fiber and cable. Existing overhead facilities will not be removed until the proposed underground facilities are in place and functional. This is critical for the demolition and construction of the Western portion of the Washington Ave. bridge.

13 Nstar Electric's work on Spruce Street is not dependent or related to their work on Washington Ave. and can be completed once the site on Spruce Street has been cleared and the proper easements (if necessary) are in place.